

In The Claims:

Please cancel claims 31-80 and 134 and 135, without prejudice or disclaimer to the subject matter disclosed therein.

Please amend claims 19, 21, 22, 81, 82, 85, 89, 92, 101, 105, 108, 129, 130 and 136-138 as follows:

19. A plant part having an altered phenotype as a result of transcription of a DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue; a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product; and a transcription termination region, wherein said components are functional in said embryonic seed tissue, whereby said plant part having an altered phenotype is produced.

21. A DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue; a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product; and a transcription termination region, wherein said components are functional in a plant cell.

22. A DNA construct comprising as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue; a DNA sequence of interest from a gene which is native to a plant host or a mutant of a gene which is native to a plant host; and a transcription termination region, wherein said components are functional in said plant host.

81. A method for obtaining a plant having a regulatable phenotype, said method comprising;

transforming a host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a, wherein transcription of said gene is preferentially regulated in embryonic seed tissue; a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product, and a transcription termination region, wherein said components are functional in a plant cell;

whereby said DNA construct becomes integrated into a genome of said plant
regenerating a plant from said transformed plant cell, and
growing said plant under conditions whereby said DNA sequence of interest is expressed and a plant having said regulatable phenotype is obtained.

82. A method for altering the phenotype of a plant tissue of interest as distinct from other plant tissue, said method comprising:

growing a plant, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for expression or modulation of an endogenous product, and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcriptional initiation region and a plant having an altered phenotype is obtained.

85. A method for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest as distinct from other plant tissue, said method comprising:

transforming under genomic integration conditions, a host plant cell with a DNA construct comprising in the 5' to 3' direction of transcription, a transcriptional initiation region

from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue, a DNA sequence of interest other than the native coding sequence of said gene which provides for expression or modulation of an endogenous product, and a transcriptional termination region, whereby said DNA construct becomes integrated into the genome of said plant cell;

regenerating a plant from said transformed host cell; and

growing said plant to produce a plant tissue of interest having a modified genotype.

89. A method for modifying transcription in plant tissue of interest as distinct from other plant tissue, said method comprising:

growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in embryonic seed tissue, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for expression or modulation of an endogenous product, and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcription initiation region specifically regulated in said plant tissue of interest.

92. A method to selectively express a heterologous DNA sequence of interest in a plant tissue of interest, said method comprising:

growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in embryonic seed tissue, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for expression or modulation of an endogenous product, and a transcriptional termination region downstream of said DNA sequence of interest, whereby said

DNA sequence of interest is expressed under control of said transcriptional initiation region specifically regulated in said embryonic seed tissue.

101. A method for modifying the genotype of a plant to impart a desired characteristic to a plant tissue of interest as distinct from other plant tissue, said method comprising:

transforming under genomic integration conditions, a host plant cell with a DNA construct comprising in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue, a DNA sequence of interest which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence of interest is not the native coding sequence of said gene, and: a transcriptional termination region, whereby said DNA construct becomes integrated into the genome of said plant cell;

regenerating a plant from said transformed host cell; and

growing said plant to produce a plant tissue of interest having a modified genotype.

105. A method for modifying transcription in plant tissue of interest as distinct from other plant tissue, said method comprising

growing a plant capable of developing plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in embryonic seed tissue, a DNA sequence of interest which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence of interest is not the coding sequence native to said transcriptional initiation region, and a transcriptional termination region, whereby said DNA sequence of interest is transcribed under transcriptional control of said transcription initiation region specifically regulated in said plant tissue of interest.

108. A method to selectively express a heterologous DNA sequence of interest in a plant tissue of interest as distinct from other plant tissue, said method comprising:

growing a plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in embryonic seed tissue, a DNA sequence of interest which is from a gene native to a plant host or from a mutant of a gene which is native to a plant host, wherein said DNA sequence is not the coding sequence native to said transcriptional initiation region, a transcriptional termination region downstream of said DNA sequence of interest, whereby said DNA sequence of interest is expressed under control of said transcriptional specifically regulated in said plant tissue of interest.

129. A method for obtaining a plant having a regulatable phenotype, said method comprising:

transforming a host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in seed embryonic tissue and wherein said gene does not encode phaseolin, a DNA sequence of interest other than the native coding sequence of said gene, and a transcription termination region, wherein said components are functional in a plant cell,

whereby said DNA construct becomes integrated into a genome of said plant cell;
regenerating a plant from said transformed plant cell, and

growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.

130. A method for altering the phenotype of a plant tissue of interest, said method comprising:

growing a plant, wherein said plant comprises cells containing a DNA construct integrated into their genome, said DNA construct comprising, in the 5' to 3' direction of transcription, a transcriptional initiation region from a gene, wherein transcription of said gene is preferentially regulated in seed embryonic tissue and wherein said gene does not encode

phaseolin, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region, and a transcriptional termination region;

whereby said DNA sequence of interest is transcribed under transcriptional control of said transcriptional initiation region, and a plant having an altered phenotype is obtained.

136. A method to selectively express a heterologous DNA sequence of interest in a dicotyledonous plant tissue of interest as distinct from other dicotyledonous plant tissue, said method comprising:

growing a dicotyledonous plant capable of developing a plant tissue of interest under conditions to produce said plant tissue of interest, wherein said plant comprises cells having a genomically integrated DNA construct comprising, as operably linked components in the 5' to 3' direction of transcription, a transcriptional initiation region specifically regulated in embryonic seed tissue, a DNA sequence of interest other than the coding sequence native to said transcriptional initiation region which provides for expression or modulation of an endogenous product, and a transcriptional termination region downstream of said DNA sequence of interest, whereby said DNA sequence of interest is expressed under control of said transcriptional initiation region specifically regulated in said plant tissue of interest.

137. A method for obtaining a dicotyledonous plant having a regulatable phenotype, said method comprising:

transforming a dicotyledonous host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in embryonic seed tissue, a DNA sequence of interest other than the native coding sequence of said gene which provides for at least one of increased capability of protein storage, improved nutrient source, enhanced response to light, enhanced dehydration resistance, enhanced herbicide resistance, enhanced resistance to viruses, insects or fungi, and a transcription termination region, wherein said components are functional in a plant cell, whereby said DNA construct becomes integrated into a genome of said plant cell;

regenerating a plant from said transformed plant cell, and growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.

138. A method for obtaining a dicotyledonous plant having a regulatable phenotype, said method comprising:

transforming a dicotyledonous host plant cell with a DNA construct under genomic integration conditions, wherein said construct comprises as operably linked components in the direction of transcription, a promoter region obtainable from a gene, wherein transcription of said gene is preferentially regulated in seed embryonic tissue and wherein said gene does not encode phaseolin, a DNA sequence of interest other than the native coding sequence of said gene, and a transcription termination region, wherein said components are functional in a plant cell,

whereby said DNA construct becomes integrated into a genome of said plant cell;

regenerating a plant from said transformed plant cell, and

growing said plant under conditions whereby said DNA sequence of interest is expressed, and a plant having said regulatable phenotype is obtained.